



# Indoor Fugitive Emissions

NR 445 Technical Advisory Work Group  
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# Indoor Fugitive Emissions

- ◆ Use in Different Program Elements
  - ◆ Standards
  - ◆ Permits
  - ◆ Inventory
- ◆ Original Premise (1988)
- ◆ Concerns
- ◆ Initial Proposal (November 2000)
- ◆ Reaction
- ◆ Staff Recommendations



March 1, 2001

# Acute, Non-carcinogenic HAP's

## ◆ New Sources

- ◆ **Included** in determining *applicability thresholds for standards* in NR 445.04 (no exclusion listed)
- ◆ **Not included** in determining whether total *source impact exceeds AAC* - NR 445.04(1)(c)4, (2)(c)2 & (4)(c)4
- ◆ **Not included** in determining whether a source needs a *construction permit* - NR 406.04(3)(c)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)



March 1, 2001

# Acute, Non-carcinogenic HAP's

## ◆ Existing Sources

- ◆ **Not included** in determining *applicability thresholds for standards* - NR 445.05(6)(d)3
- ◆ **Not included** in determining whether *total source impact exceeds AAC* - NR 445.05(1)(c)4, (2)(c)2 & (4)(c)4
- ◆ **Included** in determining whether a source needs an *operation permit* (based on MTE, no exclusion listed)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)



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# Chronic, Non-carcinogenic HAP's (RfC's)

## ◆ New Sources

- ◆ **Included** in determining *applicability thresholds for standards* in NR 445.04 (no exclusion listed)
- ◆ **Not included** in determining whether *total source impact exceeds RfC* if they have a TLV and are in compliance w/ OSHA - NR 445.04(4r)(b)4
- ◆ **Not included** in determining whether a source needs a *construction permit* - NR 406.04(3)(c)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)



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# Chronic, Non-carcinogenic HAP's (RfC's)

## ◆ Existing Sources

- ◆ **Not included** in determining *applicability thresholds for standards* if they have a TLV and are in compliance w/ OSHA - NR 445.05(6)(d)7
- ◆ **Not included** in determining whether *total source impact exceeds RfC* if they have a TLV and are in compliance w/ OSHA - NR 445.05(4r)(b)4
- ◆ **Included** in determining whether a source needs an *operation permit* (based on MTE, no exclusion listed)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)



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# Carcinogenic HAP's

## ◆ New Sources

- ◆ **Included** in determining *applicability thresholds for standards* in NR 445.04 (no exclusion listed)
- ◆ **Not included** in determining whether *BACT or LAER* apply if they have a TLV and are in compliance w/ OSHA - NR 445.04(3)(c)6
- ◆ **Included** in determining whether a source needs a *construction permit* (no exclusion listed)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)



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# Carcinogenic HAP's

## ◆ Existing Sources

- ◆ **Included** in determining *applicability thresholds for standards* (no exclusion listed)
- ◆ **Not included** in determining whether *BACT or LAER* apply if they have a TLV and are in compliance w/ OSHA - NR 445.05(3)(c)7
- ◆ **Included** in determining whether a source needs an *operation permit* (based on MTE, no exclusion listed)
- ◆ **Included** for *inventory reporting* NR 438 (no exclusion)





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# Original Premise (1988)

- ◆ Not a Public Health Concern
  - ◆ Dilution will protect public health
- ◆ Difficult to Quantify
- ◆ Costly to Control
- ◆ Indoor Air Quality Regulated by OSHA



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# DNR (& Public Health Agencies) Concerns

- ◆ Inconsistent Application & Lack of Clarity
  - ◆ general ventilation (e.g., open sides, doors & windows)
  - ◆ not all carcinogens have TLV's
  - ◆ means/demo of compliance (e.g., supplied air)
- ◆ No Evaluation of Acute Impact
- ◆ Close Fence Lines
- ◆ No Evaluation of Ability to Reduce Emissions



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# Initial Proposal (November 2000)

- ◆ Change Definition
  - ◆ better define enclosure (PSD)
  - ◆ examine “ability to control”
- ◆ Require All HAP’s to Demonstrate Meeting OSHA Requirements
- ◆ Emissions Not Released to Ambient Air Are Not Regulated



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# Reaction

## ◆ Regulated Community

- ◆ Proposal would significantly increase regulatory burden (number of HAP's)
- ◆ DNR does not have regulatory authority
- ◆ Change in definition does not remove ambiguity
- ◆ Use of the exemption should not be premised on ability to control



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# Reaction

## ◆ Health Officials & Public

- ◆ Change is needed to ensure adequate protection of public health
- ◆ Lack of authority to address complaints is frustrating
- ◆ OSHA does not inspect source often enough to ensure TLV's are being met in the workplace
- ◆ Emissions are being exempted inappropriately



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# Staff Recommendations (March 2001)

- ◆ Leave Definition Unchanged
  - ◆ consistency issue can be addressed internally
- ◆ Do Not Add OSHA Requirements for Acute, Non-carcinogenic HAP's
  - ◆ can develop better relationships with indoor air quality specialists
- ◆ Address Concerns In Guidance



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# Focus of Guidance

## ◆ Clarification

- ◆ Define when and when not to include indoor fugitive emissions for different program elements (permits, standards and inventory)
- ◆ List carcinogens and RfC compounds eligible for standards exemption
- ◆ Define what makes up an acceptable demonstration of “OSHA compliance”



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# Focus of Guidance

- ◆ Define what general ventilation is (examples)
  - ◆ heating or cooling
  - ◆ removing a contaminant
  - ◆ dilution
  - ◆ make-up air
- ◆ and is not
  - ◆ localized exhaust systems
  - ◆ part of a production process